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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Elizabeth Gay Frayne
		Art Unit	1623
		Examiner Name	D. Khan
Sheet	1	of	3
		Attorney Docket Number	

10/007489

12/08/01

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number - Kind Code 2 (if known)				
AL		US-6,239,265	5-29-01	Cook, Phillip Dan		
		US-6,326,478	12-4-01	Cheruvallath, Z. S. et al		
		US-6,310,198	10-30-01	Tang, Jin-Yan et al		
		US-6,294,664	9-25-01	Ravikumar, et al		
		US-6,117,993	9-12-00	Iyer, R. P. et al		
		US-6,031,092	2-29-00	Just, G. et al		
		US-5,883,237	3-16-99	Stee, W. J. et al		
		US-5,644,048	7-1-97	Yau, E. K.		
		US-6,096,880	8-1-00	Kool, E. T.		
		US-5,990,300	9-23-99	Hlatt, A. C.		
		US-5,932,450	9-3-99	Dattagupta, N. et al		
		US-5,916,777	6-29-99	Kacra, D. L. et al		
		US-5,739,311	4-14-98	Lackey, D. L. et al		
		US-5,650,271	7-22-97	Richards, R. M.		
		US-5,635,488	6-3-97	Cook, Phillip D.		
	AL		US-5,629,177	5-13-97	Hyman, E. D.	
		US-				
		US-				
		US-				

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. 1	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code 3	-Number 4 - Kind Code 5 (if known)				

Examiner Signature	<i>duane</i>	Date Considered	11/21/03
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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Substitute for form 1449B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number		
			Filing Date		
			First Named Inventor	Elizabeth G. Frayne	
			Group Art Unit		
			Examiner Name		
Sheet	2	of	3	Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
Not Considered IDS not Required		J. MURRAY Ed. (1992) "Antisense RNA & DNA," Wiley-Liss, New York.	
		VAN DER KROL, et al (1988) Biotechniques 6: 958-975.	
		CLERCQ, et al (1970) Virology 42: 421-428	
		FROEHLER et al (1986) Nucleic Acids Res. 14: 5399-5407.	
		SINHA et al (1983) Tetrahedron Lett. 24: 5843-5846.	
		LET SINGER et al (1965) J. American Chemical Soc. 87: 3526.	
		SINHA and FRY (1984) In Sanghui and Cook (Eds) "Carbohydrate Modifications in Antisense Research," American Chemical Society, Washington, D.C.	
		GRIFFITHS and EPERON (1987) Nucleic Acids Res. 15: 4145-4162	
		SUT and EPERON (1992) Nucleic Acids Res. 20: 6303-6309.	
	EKSTEIN (1985) Annu. Rev. Biochem. 54: 367-402.		

Examiner Signature	<i>McName</i>	Date Considered	11/21/03
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Elizabeth B. Frayne
		Group Art Unit	
		Examiner Name	
Sheet 3 of 3	Attorney Docket Number		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
Not considered as stated in Amendment rec'd 10/2/03		KOZLOKIEWICZ et al (1995) Nucleic Acid Res. 23: 5000-5005.	
		NIETO et al (1994) Science 264: 835-839.	
		MORGAN et al (1993) Nucleic Acids Res. 21: 4615-4620.	
		WOLF (1992) PNAS 89: 7305-7309.	
		MATZURA and ECKSTEIN (1968) European J. Biochem. 3: 448-452	
		BURGERS and ECKSTEIN (1979) J. Biol. Chem. 254: 6889-6893.	
		GOODMAN et al (1993) Crit. Rev. Biochem. Mol. Biol. 28: 83-126.	

Examiner Signature	<i>McH...</i>	Date Considered	11/21/03
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PTO/SB/068 (08-03)
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/007,489
Filing Date	12/05/2001
First Named Inventor	Elizabeth G. Frayne
Art Unit	1623
Examiner Name	Devesh Khare
Attorney Docket Number	

Sheet	2	of	2
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M		MELGAR, E. and GOLDTHWAIT, D. A. "The effect of metals on the mechanism of action of deoxyribonuclease" (1968) J. Biol. Chem. 243: page 4414.	
		S. F.	
dm		SPITZER, and ECKSTEIN, "Inhibition of deoxyribonucleases by phosphorothioate groups in oligodeoxy ribonucleotides" (1988) Nucleic Acids Res 16: pages 11696-97 and 11701-11702.	
dm		POTTER, B. V. L., ROMANCIUK, P. J., and ECKSTEIN, F. (1983) "The stereochemical course of DNA hydrolysis by SI nuclease" J Biol Chem 258: 1758-1760. pg 1759.	

Examiner Signature	dhare	Date Considered	10/18/04
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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